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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
 REGION III
 841 Chestnut Building
 Philadelphia, Pennsylvania 19107

ORIGINAL
(1)

SUBJECT: Review of SI for *Rodate Manufacturing Company* **DATE:**

SEP 22 1989

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FROM: Fred Sturniolo, Hydrologist
 Site Support Section (3HW26)

TO: Ben Mykijewycz, Chief
 James McCreary, SIO
 Site Investigation Section (3HW23)

SI Report Checklist - Hydrogeology

<u>I. Section 2.0, The Site</u>	Yes	No	NA
1. USGS quad indicated	✓		
2. Latitude and longitude noted	✓		
3. Discussion refers to site sketch in text	✓		
4. Proper USGS symbols indicated on site sketch	✓		
5. Site boundaries, if known, indicated on site sketch	✓		
6. North arrow oriented properly on site sketch	✓		
7. Narrative and site sketch are consistent	✓		
8. Approximate scale is provided in narrative or on site sketch	✓		

II. Section 3.0, Environmental Setting

Yes

No

NA

A. Water Supply

1. All sources of public water supplies described:
 a. Groundwater

✓

⑨ Is the groundwater from the 6 production wells mixed or is it distributed separately to specific areas? These details of the distribution

- b. Surface water

✓

10 system should be included in the narrative. Please revise

→ The drinking water intake mentioned in the surface water section should be mentioned in the water supply section narrative.

2. Distance from site to public water supply noted (surface water intakes and/or water supply wells)

✓

3. Depth of water supply wells indicated

✓

4. Aquifer(s) that water supply wells draw from are described

✓

5. Approximate number of people that are provided with water from public supply wells are indicated

✓

6. Depth of domestic wells are indicated

✓

7. Aquifer(s) that domestic wells draw from are described

✓

8. Approximate number of people that are provided with water from domestic wells are indicated

✓

9. Supporting well log information included

✓

10. 5-mile radius map contains:

- a. Location of surface water intakes

✓

- b. Location of public water supply wells

✓

B. Surface Water

Yes No NA

1. Artificial and natural surface water bodies identified (includes springs, lakes, ponds intermittent and perennial streams, etc)

✓

2. Distances on streams/creeks/rivers noted in stream miles

✓

3. Drainage patterns described

✓

⑪ Please describe this element.

4. Hydrologic and geologic aspects of wetlands discussed

✓

⑫ The existence or non-existence of wetland areas should be mentioned,

C. Geology

Yes No NA

1. Formations underlying the site described

✓

2. Other formations present within the 3-mile radius but not under the site are described with respect to:

a. Stratigraphic relationships

✓

b. Location to site

✓

3. Structural features described

✓

<u>D. Soils</u>	Yes	No	ORIGINAL (Red) NA
1. Native soils identified via SCS reports	✓		
2. Soil map included	✓		
3. Non-native soils, or disturbances to natural soils, qualitatively identified	✓		
4. Permeability of natural soils indicated			✓
5. pH of natural soils indicated			✓

<u>E. Groundwater</u>	Yes	No	NA
1. Uppermost aquifer underlying the site and any aquifers hydraulically connected are described	✓		
2. Aquifer characteristics of aquifer(s) described in E1	✓		
3. Confining units/barriers to ground-water flow are described	✓		
4. Information is consistent with:	✓		
a. Geology section			
b. Water supply section	✓		

III. Information Sources

	Yes	No	NA
1. Proper USGS or state geologic survey reports used for <u>Geology</u> and <u>Groundwater</u> section	✓		
2. Available State database information or well survey results used to document <u>Water Supply</u> and <u>Groundwaters</u> section	✓		
3. Additional information from local, state or federal agencies appropriately used	✓		

IV. SI form

Part 5 III Groundwater

	Yes	No	NA
01. Groundwater use in vicinity = groundwater use within 3 miles of the site	✓		
04. Depth to groundwater = depth to groundwater in soils, unconfined aquifer <u>or</u> depth to top of confined aquifer	✓		
08. Sole source aquifer designated in accordance with section 1427 of SDWA	✓		
09. Description of wells = description of nearest known drinking water well		✓	
10. Recharge should only be identified if it is to aquifer(s) noted in E1	✓		
#11. Discharge should only be identified if it is to aquifer(s) noted in E1		✓	

13 The descriptive information for the nearest known drinking water well should be included in this area.

14 This item refers to discharge from the aquifer. ~~This is~~ usually to local streams or rivers in the area. Please revise appropriately.

Part 5 VI Environmental Information

	Yes	No	NA
01. Permeability ranges identified match those noted in the HRS		✓	
02. "Permeability of bedrock" should provide information on permeability of uppermost aquifer	✓		
05. Soil pH can be a numerical range as defined in SCS reports			✓
13. Appropriate land use category is underlined	✓		

VI. Additional Comments: (If no additional comments write N/A)

15 → This item should be revised to a value in the appropriate range category.

~~Section 3.1 Summary mentions that samples from~~

16 The narrative of section 3 should reference where Figure 3,4 was obtained from. In addition a description of how the analysis was performed should be included within the narrative.

17 Section 8.1 Summary mentions that samples from "four shallower monitoring wells located just off site showed trace to notable levels of the volatile organic compounds" while Section 2.2 Site Layout mentions, in the second paragraph, that "All of the wells were locked and inaccessible at the time of the FIT visit." How could samples be obtained from monitoring wells if they were locked? Please revise to eliminate this discrepancy. In addition all information

regarding the monitoring, wells should be included within this report. Monitoring well logs, construction techniques, materials, etc. should be included. Is this information available?